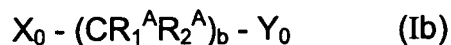


I. AMENDMENTS TO THE CLAIMS:

Claims 1 to 16. (Canceled)

Claim 17. (Currently Amended) A method to form films having hydro and oil repellant properties on surfaces of objects, said method comprising applying to said surfaces aqueous dispersions of fluorinated oligourethanes having a number average molecular weight lower than or equal to 9,000, determined by vapor pressure osmometry, said oligourethanes having a branched structure, optionally crosslinked, formed of the following monomers and macromers:

- a) aliphatic, cycloaliphatic or aromatic polyisocyanates, having NCO functionality, determined by titration with dibutylamine-HCl (ASTM D2572), higher than 2;
- b) bifunctional hydrogenated monomers wherein the two functions are chemically different, having formula:



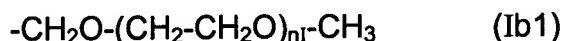
wherein:

R_1^A and R_2^A , equal to or different from each other, are H, aliphatic radicals from 1 to 10 carbon atoms,

b is an integer in the range 1-20,

$X_0 = X_A H$ with $X_A = O, S$,

Y_0 is anionic or cationic salifiable function, or, when in the formula (Ib) $X_0 = OH$, $b = 1$, $R_1^A = R_2^A = H$, Y_0 is a hydrophilic group having formula



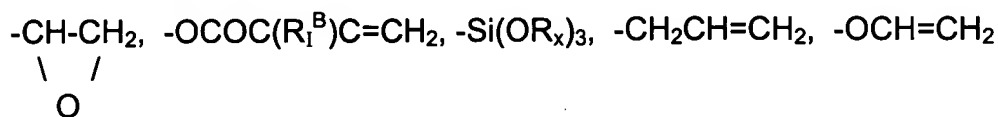
wherein nI is an integer in the range 3-20;

and one or more of the following compounds:

- c) bifunctional hydroxyl (per)fluoropolyethers having a number average molecular weight in the range 400-3,000;
- e) monofunctional hydroxyl (per)fluoropolyethers (e^0) or monofunctional hydroxyl (per)fluoroalkanes (e'), said compounds (e^0) and (e') having a number average molecular weight in the range 300-1,000,

and optionally the following compounds:

- d) hydrogenated monomers capable to insert a crosslinkable chemical function in the oligourethane, having the formula (Ib), wherein R_1^A , R_2^A , b and X_0 are as above defined and Y_0 is selected from the following functional groups:



wherein

$\text{R}_1^B = \text{H}, \text{CH}_3$;

R_x is a saturated $\text{C}_1\text{-C}_5$;

- d¹) blocking agents of the NCO group, wherein the blocking agent is one or more compounds selected from the group consisting of ketoximes, phenols, mono- di-alkyl substituted phenols with an alkylic chain containing from 1 to 8 carbon atoms, pyrazol, caprolactam, ethylmalonate, acetylacetone and ethylacetoacetate.

Claim 18. (Previously Presented) The method according to claim 17, wherein films are obtained by crosslinking with polyisocyanates oligourethanes consisting essentially of components a), b), and c).

Claim 19. (Previously Presented) The method according to claim 17, wherein films are obtained by thermally or photochemically crosslinking oligourethanes, said oligourethanes consisting essentially of components a), b), c), and d).

Claim 20. (Previously Presented) The method according to claim 17, wherein films are obtained by thermally crosslinking oligourethanes, said oligourethanes consisting essentially of components a), b), c), and d¹).

Claim 21. (Previously Presented) The method according to claim 17, wherein the a) aliphatic, cycloaliphatic or aromatic polyisocyanates have NCO functionality, determined by titration with dibutylamine-HCl (ASTM D2572), in the range 3-4.

Claim 22. (Previously Presented) The method according to claim 17, wherein for b), b is an integer in the range 1-10.

Claim 23. (Previously Presented) The method according to claim 17, wherein the number average molecular weight of c) bifunctional hydroxyl (per)fluoropolyethers (PFPE diols) is in the range 700-2,000.

Claim 24. (Previously Presented) The method according to claim 17, wherein the number average molecular weight of e) monofunctional hydroxyl (per)fluoropolyethers (e^0) or monofunctional hydroxyl (per)fluoroalkanes (e') is in the range 400-800.

Claim 25. (Canceled)

Claim 26. (Previously Presented) The method according to claim 17, wherein films are obtained by crosslinking with polyisocyanates oligourethanes consisting essentially of components a), b), c), and e).

Claim 27. (Previously Presented) The method according to claim 17, wherein films are obtained by crosslinking with thermally or photochemically oligourethanes, said oligourethanes consisting essentially of components a), b), c), d), and e).

Claim 28. (Previously Presented) The method according to claim 17, wherein films are obtained by thermally crosslinking oligourethanes consisting essentially of components a), b), c), d^I), and e).

Claim 29. (Previously Presented) The method according to claim 18, wherein component c) is substituted with component e).

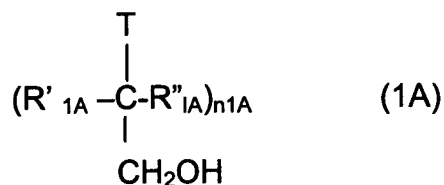
Claim 30. (Previously Presented) The method according to claim 19, wherein component c) is substituted with component e).

Claim 31. (Previously Presented) The method according to claim 20, wherein component c) is substituted with component e).

Claim 32. (Currently Amended) The method according to claim 17, wherein the amounts of the components a) – c) are the following:

- component a): 10-70% by weight based on the total dry oligourethane, component b): the moles of b) are in a ratio with the moles of the NCO groups of a) ranging from 1/3: 1 to 2/3: 1;
- component c): the moles of the hydroxyl groups of component c) are in a ratio with the moles of the residual free NCO groups (the difference between the total ones and those reacted with b)) in the range 3-1.1; the component c) can also be absent and in this case component e) is present; when c) is absent, the amount by moles of the components e) + d) + d^I) is in a ~~ratio~~ ratio 1 : 1 with the moles of residual NCO (the difference between the initial total moles of a) and the moles of a) reacted with b)), and component e) must be present in an amount of at least 30% by weight based on the dry product;
- when component c) is present the total moles of the components d) + d^I) + e) are in a percentage in the range 0-90% with respect to the moles of the component b).

Claim 33. (Previously Presented) The method according to claim 17, wherein the monomers mentioned in b) have the function X_AH with X_A = O and the following structure formula:

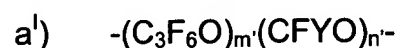


wherein T is SO₃H, COOH, or a tertiary aminic group NR'_NR''_N, wherein R'_N and R''_N equal to or different from each other, are a linear or branched C₁-C₆ alkyl, R'_{1A} and R''_{1A}, equal to or different from each other, are hydrogen or a linear or branched C₁-C₄ alkyl; n_{1A} is an integer in the range 1-10.

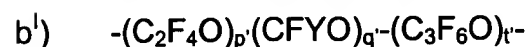
Claim 34. (Previously Presented) The method according to claim 33, in formula (1A) T is a tertiary aminic group.

Claim 35. (Previously Presented) The method according to claim 17, wherein the bifunctional (per)fluoropolyethers mentioned in c) have one or more of the following units statistically distributed along the chain: (C_3F_6O) , $(CFYO)$ wherein Y is F or CF_3 , (C_2F_4O) , $(CR_4R_5CF_2CF_2O)$ wherein R_4 and R_5 are equal to or different from each other selected from H, Cl, and one fluorine atom of the perfluoromethylene unit can be substituted with H, Cl or (per)fluoroalkyl, having from 1 to 4 carbon atoms.

Claim 36. (Currently Amended) The method according to claim 35, wherein the (per)fluoropolyethers are the following, with the perfluorooxyalkylene units statistically distributed along the chain:



wherein m' and n' are integers such as to give the above mentioned molecular weights, and m'/n' is in the range 5-40, n' being different from 0; Y is F or CF_3 ; n' can also be 0;



wherein p' and q' are integers such that p'/q' ranges from 5 to 0.3 and such that the molecular weight is within the above mentioned limits; t' is an integer with the meaning of m' , $Y=F$ or CF_3 ; t' can be 0 and $q'/(q'+p'+t')$ is equal to 1/10 or lower and the t'/p' ratio ranges from 0.2 to 6;



wherein R_4 and R_5 are equal to or different from each other and selected from H, Cl; the molecular weight such as to be within the above mentioned limits, and one fluorine atom of the perfluoromethylene unit can be substituted with H, Cl or (per)fluoroalkyl;

the end groups of the bifunctional (per)fluoropoly-ethers c), equal to or different from each other, ~~are of the $HO(CH_2CH_2O)_{x_0}CH_2-$ type~~ have formula $HO(CH_2CH_2O)_{x_0}CH_2-$, wherein x_0 is an integer from 0 to 4.

Claim 37. (Previously Presented) The method according to claim 17, wherein the monomers d) have the formula (1A) herein R'_{1A} , R''_{1A} and n_{1A} are as above defined, T is selected from the groups which in component d) are at the place of the function Y_0 , the OH group can optionally be substituted with an $-SH$ group.

Claim 38. (Currently Amended) The method according to claim 35, wherein the component e) is formed of hydroxyl mono-functional (per)fluoropolyethers, said (per)fluoropolyethers ~~comprise~~ having one or more (per)fluorooxyalkylene units as indicated in claim 35.

Claim 39. (Previously Presented) The method according to claim 38, wherein the (per)fluoropolyethers are the following, wherein the units are statistically distributed along the chain:

IB) $A'O(C_3F_6O)_m(CFYO)_n-$

wherein Y is -F, -CF₃; A' = -CF₃, -C₂F₅, -C₃F₇, -CF₂Cl, C₂F₄Cl; the C₃F₆O and CFYO units are randomly distributed along the (per)fluoropolyether chain, m and n are integers, the m/n ratio is ≥ 2 ;

IIB) $C_3F_7O(C_3F_6O)_m-$

wherein m is an integer, wherein the number average molecular weight is that above mentioned;

IIIB) $(C_3F_6O)_m(C_2F_4O)_n(CFYO)_q$

wherein Y is equal to -F, -CF₃; m, n and q, different from zero, are integers such that the number average molecular weight is that indicated for the component e);

the end group being of the HO(CH₂CH₂O)_{x0}CH₂- type wherein x0 is an integer in the range 0-4.

Claim 40. (Currently Amended) The method according to claim 17, wherein the component e) is formed of hydroxyl monofunctional (per)fluoroalkanes having the formula:



wherein R_f is a fluoroalkyl C₃-C₃₀ radical; pl is 1 or 2; Q is bivalent aliphatic C₁-C₁₂ or aromatic C₆-C₁₂ linking bridge; Q can optionally ~~contain~~ include a substituent selected from heteroatoms, N, O, S, or carbonylimino, sulphonylimino or carbonyl groups; Q can be unsubstituted or it is bound to substituents selected from the following: halogen atoms, hydroxyl groups, C₁-C₆ alkyl radicals.

Claim 41. (Previously Presented) The method according to claim 17, wherein the number average molecular weight is in the range 2,000 – 9,000.